## Executive Commentary

During 1997, a total of 19,851 TB cases (7.4 cases per 100,000 population) were reported to CDC from the 50 states and the District of Columbia, representing a 7% decrease from 1996 and a 26% decrease from 1992, when the number of cases peaked during the resurgence of TB in the United States. The national TB case rate also steadily decreased during this period (Table 1). In 1997, 6% of cases were reported in children under 15 years old, 8% in persons aged 15-24 years, 35% in persons aged 25-44 years, 27% in persons aged 45-64 years, and 24% in persons aged 65 years and older (Table 2). During 1992-1997, there was a decline in both the number of cases reported in each of these age groups and the respective TB case rates.

An important consideration is that the overall national trends reflect the impact of varying changes within population subgroups. For example, the overall decrease in TB cases during 1992-1997 primarily reflected a 38% decrease in the number of cases among U.S.-born persons, with substantial declines in all age groups. In contrast, the number of cases among foreign-born persons increased 6% during this period, reflecting a small increase among adults aged 25-44 years, a larger increase among adults aged >45 years, and a substantial decline among children aged <15 years.[1] In terms of case rates, there was a 41% decrease in the case rate among U.S.-born persons (from 8.3 to 4.9 per 100,000), and there was a 12% decrease in the case rate among foreign-born persons (from 34 to 30 per 100,000).

The overall trends also reflect the impact of changes by geographic location. For example, during 1992-1997, the number of reported TB cases decreased in 38 states and the District of Columbia, and the decrease was generally accompanied by a decrease in the TB case rate.[1] Furthermore, the decrease (in both the number of reported cases and the case rate) was substantial for the six states (California, Florida, Illinois, New Jersey, New York, and Texas) reporting 57% of the total number of U.S. cases in 1997. Twelve states, however, reported no change or an increase in the number of reported cases.

The resurgence of TB in the United States in the late 1980s and early 1990s was associated with the emergence of multidrug-resistant TB (MDR TB) and the HIV/AIDS epidemic.[2,3] Analysis of initial drug susceptibility test results for isolates from persons with culture-positive TB found a relatively stable level of resistance to at least isoniazid and a decreasing level of MDR TB during 1993-1996.[4] Data from cases reported during 1997 confirm these trends, with 7.8% of isolates resistant to at least isoniazid and 1.4% resistant to at least isoniazid and rifampin (MDR TB) (Table 21). The decrease in the level of MDR TB was influenced by a substantial decrease in New York City; however, during 1993-1997, the proportion of MDR TB cases reported from U.S. areas excluding New York City decreased from 1.7% to 1.1%.

Incomplete reporting has limited the analysis of national TB surveillance data by HIV status. Reporting of HIV status has improved slowly since 1993, the year such information was first included on TB case reports submitted to CDC. In 1997, 52.5% of TB case reports for persons aged 25-44 years included information about HIV status. Fifteen states and New York City reported this information for at least 75% of cases among persons in this age group (Table 22). To help estimate the proportion of reported TB cases with HIV coinfection, state health departments have compared TB and AIDS registries. In the most recent registry comparison conducted by the 50 states and Puerto Rico, 14% of all TB cases (27% of cases in persons aged 25-44 years) reported during 1993-1994 had a match in the AIDS registry.[5] Both this study and recent TB surveillance data indicate that the impact of the HIV/AIDS epidemic also differs by

geographic location. For example, in 1997, over 45% of TB cases in persons aged 25-44 years reported from New York City and Florida were coinfected with HIV, whereas <2% of cases in this age group from North Dakota, South Dakota, and Oregon were reported with HIV coinfection.

During 1992-1997, the declines in the overall number of reported TB cases and in the level of MDR TB appear to reflect successful efforts to strengthen TB control following the resurgence of TB and the emergence of MDR TB. Emphasizing the first priority of TB control[6] (i.e., promptly identifying persons with TB, initiating appropriate therapy, and ensuring completion of therapy) has likely been the most important factor in achieving this improvement, through the reduction of community transmission of *M. tuberculosis*, particularly in areas with a high incidence of AIDS.[7] The substantial decline in both the number of reported cases among U.S.-born persons and the case rate for U.S.-born persons supports this inference. In comparison, the relatively stable number of reported cases among foreign-born persons along with the modest decline in the case rate among foreign-born persons is consistent with other analyses of TB surveillance data that indicate that most cases of TB among foreign-born persons residing in the United States result from infection with *M. tuberculosis* in the person's country of birth.[8] To reduce TB disease among foreign-born persons residing in the United States, CDC, in collaboration with state and local health departments, is developing a comprehensive plan that will include strategies to (1) improve case finding and completion of therapy in persons with TB disease, (2) conduct contact investigations, and (3) screen those at high risk for infection, and ensure completion of preventive therapy in eligible candidates.

To sustain the recent progress towards the goal of TB elimination, vigilant efforts to strengthen and maintain TB control programs must continue. Monitoring the success of these efforts depends on continued surveillance at the national, state, and local levels. The expanded national TB surveillance system has proven its usefulness in assisting with this important activity, particularly through the collection of data on initial drug susceptibility results. Further assessment includes another important benchmark of TB program success: the rate of completion of therapy. Future evaluation of trends in completion of therapy, based on analysis of data collected through national surveillance (Table 26), will also assist in measuring continued progress.

References

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